WALLPAPER OF THE FUTURE

Wall decoration is currently undergoing profound changes which could well revolutionise our whole way of living. The trend is towards ever greater personalisation: tomorrow's living space will have to adapt to the needs and tastes of its occupants. The exhibition presents two types of product that have a bright future ahead: one is enhanced wallpaper and the other technological wallpaper. Both are challenging accepted notions about décor and design and about creating harmony between beauty and utility.

Whether it is produced as a hand-made limited edition or by machine using the latest innovations in robotics, wallpaper is no longer happy with flat images but is undergoing increasing enhancement by way of 3D designs and textures. Star designers devise patterns for major companies made with embroidered ribbons, resin micro-pearls or pieces of slate. Other papers are embellished with wooden contouring, basalt fibres, Swarovski crystals... Craftsmen blend digital and silk-screen printing, experiment with haute couture made from paper or test out metal oxides.

But wallpaper is not just designed to be beautiful, it can also come equipped with technical innovations to improve our everyday life. Acoustic, damp-proof, impermeable, magnetic, anti-WiFi, it can even be earthquake resistant preventing walls from collapsing after an earthquake! The term wallpaper, which the manufacturers still prefer, may be justified by the fact that it is produced on a roll or applied using adhesive, but whether these products use paper as a basis or not, they also contain many other elements such as spun fibreglass and optical fibres. Scientific research is carried out in specialised departments of companies and in research institutes specialising in paper or in innovative materials.

Whilst technological, these products do not lack aesthetic charm. Digital printing, which is now possible on most materials, further enhances them creating harmony between beauty and utility. Phosphorescent or luminous wallpaper creates a special atmosphere. Patterns using QR codes provide access to Japanese haikus or the complete works of Shakespeare. In the future, outdoor wallpaper will even cover the exteriors of buildings and become part of the urban scenery.

Some of the products shown in this exhibition have already reached the shops, others are still in development but they are not something out of science fiction: they are already on the market or will be in the next few years. And what does the future have in store? Will handmade, customised or recycled wallpaper make a big comeback? Or will our walls be part of an automated home, connected, smart and interactive? Changing colour at a touch, transforming to suit our mood, stimulating all our senses? We can always dream...

Direction: Isabelle Dubois-Brinkmann, Chief Curator of Cultural Heritage
CONTACT
Front desk                         musee.papier.peint@wanadoo.fr
Director : M. Philippe de Fabry    mpp.ph.defabry@wanadoo.fr
Curator Mme Isabelle Dubois-Brinkmann mpp.i.dubois-brinkmann@orange.fr
Press                              mpp.communication@orange.fr

PRACTICAL INFORMATION

Postal Address
Musée du Papier Peint
La Commanderie - 28 rue Zuber - BP 41
F – 68171 RIXHEIM Cedex
Tel.  +33 (0)3 89 64 24 56
Fax. +33 (0)3 89 54 33 06
Internet: www.museepapierpeint.org

How to reach us:
A35 Motorway - towards Basel - Exit 33 Rixheim -
Follow sign posts to “Centre Ville” then “Musée du Papier Peint”

Public transport:
Soléa  bus (from Mulhouse station) - N°18 Mulhouse ↔ Rixheim
Bus stop Commanderie (Sundays N°67, taxi-bus)
SNCF Station – Rixheim (SNCF train or bus service)
Follow avenue de Gaulle towards “Centre Ville” (10 minutes on foot)

Opening hours:
10 am - midday and 2 pm - 6 pm

Open every day from 2 May to 31 October
Closed Tuesdays between 1 November and 30 April
Closed: 1 January, Good Friday, 1 May and 25 December

Demonstration of wood-block printing:
1 June - 30 September, Tuesdays, Thursdays and Saturdays at 3:30 pm
Included in the entrance fee.

Admission fees 2017
Full price: € 8.50
Reduced price: € 5.00 (disabled, student, unemployed)
Group tariff: € 7.00 per person (from 20 people)
Accompanied children under 16: free

Guided visits by prior arrangement: € 70.00 per group
French or German € 35.00 per group for school children or students

Ticket twinned with the Museum of Printed Textiles in Mulhouse:
Full price: € 12.00
Reduced price: €10 (group, disabled, student, unemployed)
COMPANIES TAKING PART IN THE EXHIBITION

- Atelier Doffard
- Marburg
- Aurélie Mossé
- Buzzi Space
- Kast
- Custom
- Architect Paper
- Prime X
- ExperCem
- Ohmywall
- Groovy Magnets
- Vodafone
- Meystyle
- Tracy Kendall Wallpaper
- Wall & Deco
- Design
- Lola Q.
- PQR
The company Marburger Tapetenfabrik, which sells its products under the “Marburg” brand name, was founded in 1845 by Johann Bertram Schaefer in Marburg in the region of Hessen in Germany. Starting off in furniture and interior design, it specialised in wallpaper in 1875.

Having been completely destroyed in 1945, at the end of the Second World War, the factory was rebuilt in Kirchhain, not far from Marburg. A family firm now in its 5th generation of ownership under the management of Ullrich Eitel, it is today a leading name in the industry. It employs 350 people, has a turnover of 75 million and exports 14 million rolls a year to 90 countries, mainly in the European Union but also Russia, the United States and China.

The Marburg factory prior to the Second World War

The Marburg factory has always been well-known for its research into new materials as well as for its design. It contributed, for example, to the development of free-repeat pattern wallpapers, fabric-look wall-coverings, foamed vinyl (3D structure) and non-woven wallpaper. For several years, it has been developing technical products such as anti-WiFi wallpaper which blocks out x-rays and electro-smog. The company’s most recent product, Art Luminaire wallpaper, which is made up of neon fibres radiating different colours into the darkness, is displayed in the next room.

Since the 1950s, the company has deployed artists whose creations were classics of their time (Hans Leistikow and Elsbeth Kupferoth in 1954, then Niki de Saint Phalle and, in particular, Jean Tinguely in 1972). Since 2000, Marburg has commissioned several famous designers each of whom provides their own personal view of the world, their own distinctive signature.
Dieter Langer, Artistic Director of the company, has developed several collections which bear his name. Alongside neo-pop graphics, he offers highly textured products working on fabric or metallic looks, offering a new take on classic designs.

Ulf Moritz, who has been working for Marburg since 1999, trained as a textile designer which makes him particularly sensitive to texture and materials. His patterns are achieved using resin micro-beads, mica, slate, crystals or basalt fibres. He has reinvented damask and houndstooth fabric using oversize designs and offers trompe-l’oeil décor in stucco, Japanese grasscloth or gilded copper.

Luigi Colani is an atypical designer who studied painting and sculpture at the Berlin Academy of Arts and then aerodynamics in Paris. After spending the early part of his career in the car industry, he moved into other areas of industry, designing a variety of products from pens to trains. A creator of bio-design, which adopts shapes from the natural world, he became interested in ergonomics and in the relationship between man and the objects he uses. For Marburg, he has designed wallpaper which incorporates 3D and the effects of light and shade, enhancing the surface with resin beads, embossed droplets or industrial rivets. His organic shapes which rely on curved lines are sometimes minimalist sometimes more exuberant.

Karim Rashid, a designer based in New York, began working with Marburg in 2004. Internationally recognised, and working under his own brand in all spheres of design, he has received more than three hundred prizes and awards for his creations. Claiming to have close ties with pop culture, he possesses a very recognisable style using curved lines and acidic colours, optical effects arising from contrasting colours and metallic light reflections.

Zaha Hadid, recently deceased, was one of the most striking personalities of recent decades in the field of architecture and design. She was awarded the Pritzker prize in 2004. A visionary, she devised large-format, dynamic, organic shapes for her wallpapers, sometimes bordering on op art. As a tribute to the designer, Marburg decided to put a series of designs into production which she started in 2016.

Harald Glööckler, currently Germany’s most eccentric fashion designer, also exercises his talents in the field of interior design. Created to dress an entire room, his wallpapers display right royal opulence with patterns incorporating crowns, angels’ wings, eagles and sphinxes. This sort of luxury product, created from selected materials, enhanced using 3D effects or diamanté, is enjoying great success. Gold, bronze, royal blue, imitation silk, moiré or metallic sequins are all perfect for a baroque mansion.
The London-based designer Tracy Kendall specialises in creating handmade wallpaper. Her very British sense of inventiveness and fantasy makes her one of the most creative and innovative personalities in this field.

Having graduated in art engraving and textiles from the University of Manchester, she has been combining craft and design for 40 years and treats paper more like a fabric than a flat surface.

For the wallpaper *Another colour*, which features in the photograph, she received major distinctions in 2013 (*Elle Decoration* British Design Awards - Best Pattern 2013) and 2014 (*Elle Déco* International Design Awards). Her products are on show in some of the leading museums of decorative art such as the Cooper Hewitt in New York and the Victoria & Albert Museum in London.

She has drawn particular attention for her designs depicting an oversized knife, fork and spoon which appeared in 1996 in the English edition of *Elle Decoration*. They quickly became iconic and are still produced today.

Tracy Kendall then became interested in applying objects to paper on which a pattern had already been silk-screen printed on a flat-bed, thus introducing volume and texture to her wall decoration. She sometimes uses mechanical methods (laser cutting, robotic sewing) but other papers are created entirely by hand in her London studio. For the *Tutti Fruitti Sequins* wallpaper, shown opposite, she used a textile gun to attach hundreds of coloured sequins creating a profusion of colours and shapes that dance in the light. She drew her inspiration from sequinned dresses from the art déco period.

A regular at car-boot sales and keen to introduce the most every-day items into her subject matter, she creates collages made of buttons, feathers, lace, trimmings or jigsaw pieces which are attached one by one to the sheet of paper.
Tracy Kendall also takes a particular interest in books, words and calligraphy. In 2011, she developed an impermeable outdoor wallpaper, treated to protect it against moisture and discolouration. Her new designs offer a retrospective tribute to the geometric shapes of the 1950s and to the German painter Gerhard Richter.
In the painted room

Other wallpapers are inspired by the archives of the Geffrye Museum of the Home in London, kaleidoscopic Japanese designs, Art Nouveau or historical patterns.

Archive – Geffrye No.1-2

Website: www.tracykendall.com/

RESEARCH AND DEVELOPMENT

It is difficult to imagine what our lives will be like in the future without entering the realms of science fiction but when it comes to living space, there is a noticeable trend towards greater personalisation. Technology already allows us to create a certain ambiance which can be adapted to suit the location and changed according to the day. Some examples can be seen in this room: phosphorescent wallpaper and LED* wallpaper produce a romantic and refined atmosphere. Others lead to a virtual reality by way of QR codes which, when photographed with a smart phone, provide access to digital content.

The future is going to see increased automation which will enable us to centralise the control of various systems in the home. We will increasingly be able to interact with our walls, control our environment and regulate it according to our needs. Active research is being conducted into new materials in the field of technical paper and textiles, particularly smart textiles*** which could give rise to flexible screens and surfaces capable of changing colour.

Not all research has produced saleable results however. Thermo-active wallpaper, developed not long ago, where new patterns emerge in the presence of heat, did not prove useful and now seems to have been abandoned.

This text describes some of the products currently on the market and others which are under development. A few of them are actual wallpapers but most are wallcoverings containing composite materials and new technology.

Outdoor wallpaper

Several companies are offering this type of wallcovering which can be hung on the exterior of buildings. Confidently displaying colours and patterns previously reserved for more intimate surroundings, they question the notion of public space, urban décor and the coexistence between nature and culture. At a time when street art is being
recognised by public authorities, perhaps the future will see our towns covered in bold graphics created by talented designers.

The wallpaper Out System™ presented in this room has been developed since 2012 by the Italian company Wall&decò. Resistant to impacts, rain, UV radiation and pollution, its adhesive is guaranteed for 10 years and its colour for 5.


**Phosphorescent wallpaper**

Designers have been working for some years on phosphorescent wallpaper, printed with inks that absorb natural or artificial light and give it off again in the dark. Its uses are both practical and decorative.

The wallpaper *Colour Tec – Glow in the dark*, developed by the Architects Paper® brand from the German company AS Création, has been designed specifically to provide luminous guidance in the event of a power cut in a public space. The timeless striped pattern can be painted over with water-based paint without removing the phosphorescent effect.

Architects Paper® from AS Création, *Colour Tec – Glow in the dark*

The *Phosphowall* collection from the Ich&Kar studio (Helena Ichbiah and Piotr Karczewski), produced by the German manufacturer Rasch, was awarded the Wallpaperlab prize by the Musée des Arts Déco in 2008. Apart from the practical aspect, the designers bring out humour and charm in a space which reveals a night life with a difference...

Studio Ich&Kar, Rasch, *Phosphowall collection, Cats and Minipop*
**LED* Wallpaper**

Luminous wallpapers make it possible to create a warm ambiance in locations with low lighting such as bars and clubs. Several products are already on the market.

With Art Tec, the German company Marburger Tapeten has been offering lights incorporated into a wall-covering since 2003. The wallpaper *Art luminaire* being shown in this room, has been developed more recently. It is made up of strips of thermoluminescent optical fibres which are glued onto non-woven wallpaper. The light shines through slits which have been made at regular intervals in the fibres that are linked to an LED lamp connected to an electricity socket. With a remote control, the user can choose a single colour or a succession of several colours (red, blue, green, yellow, white or multi-coloured).

The English studio Meystyle, has been designing wallpapers enhanced with crystals and LEDs since 2004, bringing the patterns to life with points of light. They are linked to printed electronic components, invisible on the surface, which are connected to an electric circuit leading to a wall socket. Crystals and LEDs are applied onto the surface by hand. The geometric, ornamental or floral patterns become simply dazzling.

Meystyle – *Between* collection. The crystals and LEDs are placed onto the paper by hand.

The LED wallpaper created in 2011 by the designer Ingo Maurer was designed in partnership with the Architects Paper® brand from the German company AS Création. It was chosen as best project from among the winners of the Interior Innovation Award in 2012. The paper is printed with a pattern of electronic circuit boards visible in daylight on which light-emitting diodes are affixed by hand to form a repetitive pattern of cubes which are visible when it gets dark. White, blue and red LEDs can appear in succession. The system includes an electronic ballast and can be activated by remote control. Production of this wallpaper is currently suspended.
Other wallcoverings are even further removed from the traditional idea of wallpaper but, whilst currently costly and reserved for large companies, they are likely to become more accessible over the next few decades.

*Luminous textile* from Philips is a luminous moving surface which also has acoustic properties. The product was designed in partnership with the firm Kvadrat Soft Cells, specialists in sound-absorbing panels. Multi-coloured LED lighting is integrated into a textiles which are mounted in aluminium frames. When placed next to each other, they can cover large surface areas in shops, offices or clinics. Clients can download videos available from a database on the Philips website or display their own material. The wall can also display luminous moving effects to create a relaxing atmosphere, or specific images evoking a brand identity thereby forming part of a company’s marketing strategy.

**Digital wallpaper: the Lumentile project (Luminous Electronic Tile)**

A team of researchers led by Professor Giuliani from the University of Pavie is leading research, financed by the European Union, into a wallcovering made up of tiles forming a digital wall.

These panels consist of three ceramic layers on top of one another, electronic and optical networks (LEDs, OLEDs**) and a transparent material (glass). Each tile makes up a pixel of the overall picture. Controlled simply by touch, this wallcovering can give off light, change colour or pattern or display pictures or videos, allowing you to transform a wall into a cinema screen at will ... or show a picture of the garden which lies on the other side of the wall!

It is designed to be placed inside or out, on the ground, wall or ceiling and can be used both as lighting and as an advertising medium. Professor Giuliani has even had the idea of a surface which could take on the shape of the item it is covering and which, if applied to military vehicles, could be used as camouflage or make buildings invisible.

Research by engineers supports the development of light-weight materials which are both effective in terms of light extraction and low cost. The project is due to go into production in 2020.
Beyond wall decoration: giant screens

Research into wall decoration is also making rapid progress. The Korean company LG Display has developed what it calls “OLED Signage wallpaper” in the form of a large panel no thicker than a credit card, which is attached onto a flat surface. It is linked by cable to a box which enables it to play videos. The product, which has just been launched, could increase in size and in the future may well be able to cover a whole wall, allowing everyone to have their own enormous home cinema - and why not?

* LED: light-emitting diode

** OLED: organic light-emitting diode Due to its light-emitting properties, the OLED does not need a backlight thus allowing the manufacture of very slim products. FOLEDs (flexible organic light-emitting diode) mounted onto woven electro-conductive fibres allow for flexible screens.

*** Smart textiles or e-textiles can receive and analyse a signal in order to respond to it in an appropriate manner. They include IT components, digital and electronic elements as well as fibres and innovative materials. They can be used in the clothing, furnishing or signage sectors (e.g. thermo-sensitive materials change colour by heating metallic threads in the fabric).
Since 1983, the Museum of Wallpaper in Rixheim has been bringing history and wallpaper to life in a location which is predestined for the task; it endeavours to demonstrate the role that this little-understood product has played in our everyday lives, both materially and emotionally...

Wallpaper has been printed in Rixheim since 1797 when a young Mulhouse company set itself up in the former Commanderie de l’Ordre teutonique, which had been nationalised in 1790, and adopted the company name of Jean Zuber & Cie in 1802.

In the course of the 19th Century, the factory acquired an international dimension, both in terms of the quality of its products, particularly the creation of around thirty panoramic wallpapers, and in terms of technology: all the well-known inventions in the industry were developed in Rixheim with the exception of mechanical printing which the factory was nevertheless the first to adopt in France. Its track record is impressive: bronze medal in 1806 at the second Paris Industrial Exhibition for the panoramic wallpaper “Views of Switzerland”, the first gold medal for wallpaper at a French exhibition in 1834 and a gold medal at the Paris World Fair in 1867. After 1918, the now much less dynamic company specialised in wood-block printing, a technique which had fallen out of use elsewhere, and once again printed panoramic wallpaper, for the American market in particular. The old material was preserved and the archives, safely stored away, served as a basis for new creations.

An investigation instigated by the National Scientific Research Council (CNRS) in 1970 discovered the size of the collections retained in Rixheim, both as wallpaper and archive material. Eventually, the collection was made available to set up a museum in 1981. Since then, these collections, augmented by those of the Mulhouse Museum of Printed Textiles and by other major acquisitions, supported in particular by FRAM Alsace, became reference collections, unparalleled anywhere in the world; they cover the entire history of wallpaper from its origins to the present day. Owned by the town of Rixheim, they are managed by an association supported by the town and the regional cultural affairs agency, DRAC Alsace.
The Museum holds over 133,000 documents:
- the complete production of Zuber & Cie, from the 18th Century to the present day
- 60,000 documents of various origins, from the 18th Century to the present day.

This collection brings together practically all aspects of wallpaper production from the most common to the most exceptional, such as the panoramic wallpapers.

Alongside the wallpapers and in close conjunction with them, the Museum holds and exhibits a collection of technical materials demonstrating how wallpaper was made from the 18th Century up to now.

The Museum has a three-fold mission:
- to make the public aware of wallpaper and its history from a wide variety of different perspectives
- to preserve and restore items bearing witness to the past in this field
- to assemble a record of wallpaper in such a way as to make this a centre for international research in the field

The Museum is a centre for research dedicated to wallpaper housing a collection of archives, documentation and a specialised library.

Unable to allow the wallpaper collections to be permanently exposed due to the fragility of the works, the Museum presents temporary exhibitions on subjects which highlight the artistic and technical aspects of wallpaper but which also demonstrate its integration into everyday life from the 18th Century up to the present day.